

ABSTRACT OF THE DISCLOSURE

Method of fabricating TFTs (thin-film transistors) having a crystallized silicon film and a gate-insulating film. First, an amorphous silicon film is formed on an insulating substrate. A first dielectric film is formed from silicon oxide on the amorphous silicon film. Holes are formed in the first dielectric film to selectively expose the surface of the amorphous silicon film. Nickel is introduced as the metal element into the amorphous silicon film. The film is heat-treated, thus forming crystallized silicon film. This crystalline silicon film is etched together with the silicon oxide film to form an active layer. The etched silicon oxide film acts as the aforementioned gate-insulating film. Even after the crystallization step, the silicon oxide film is left behind. As a result, the interface with the crystalline silicon film is kept in a good state.